

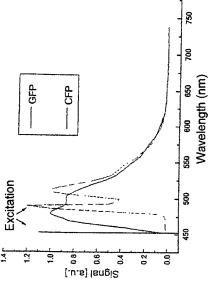
b.)

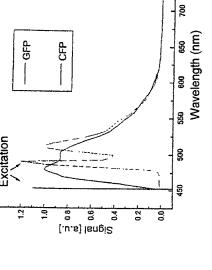
a,)

Laser Scanning Module

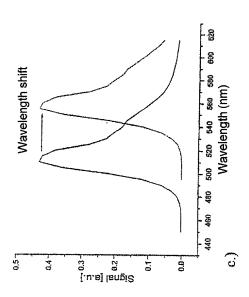
Microscope

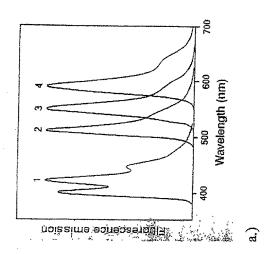
Light sources





b.)



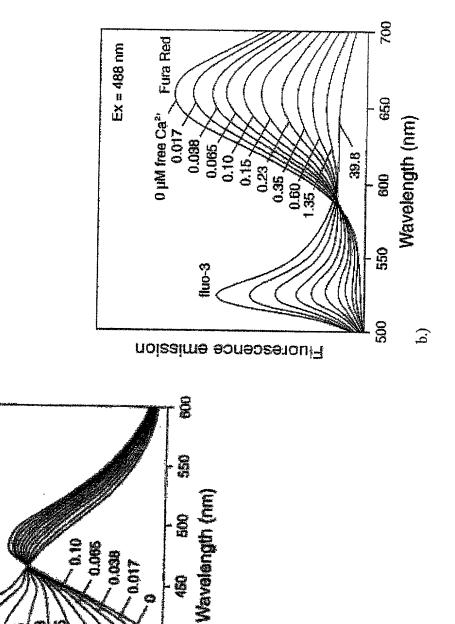


) :

m 88 m

39.0 µM free Ca*

noissime enteneatouff



3

a.)

Figure: 4

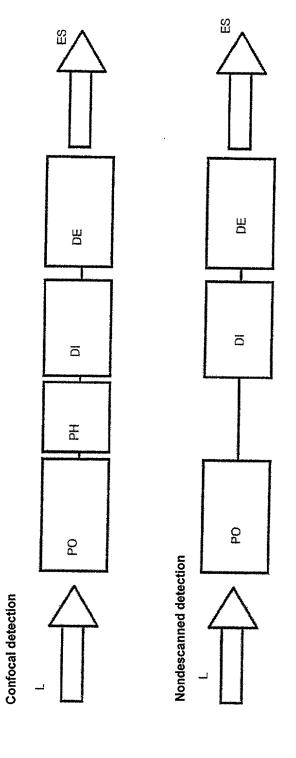
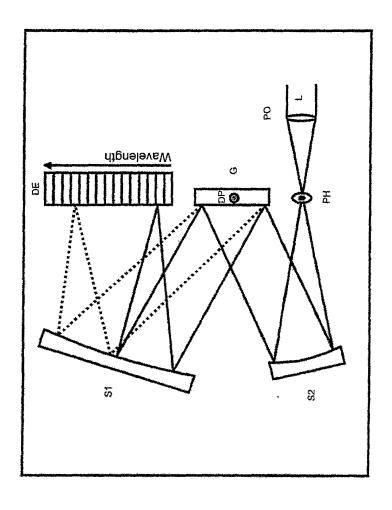
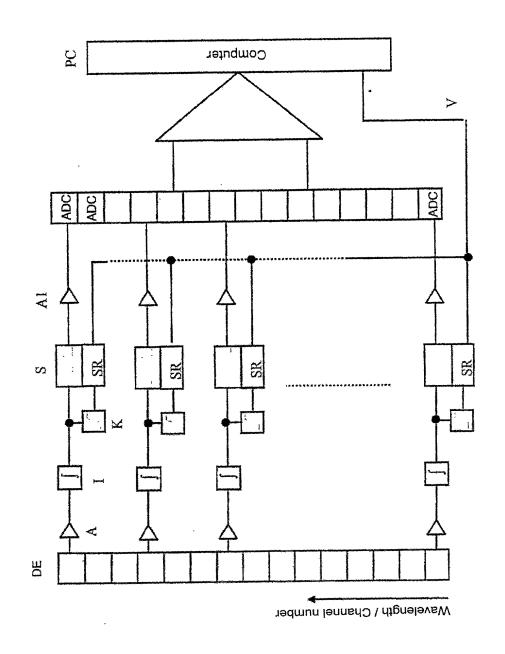
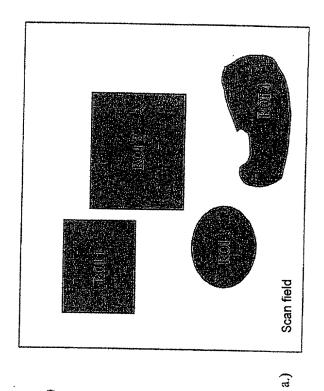


Figure: 5



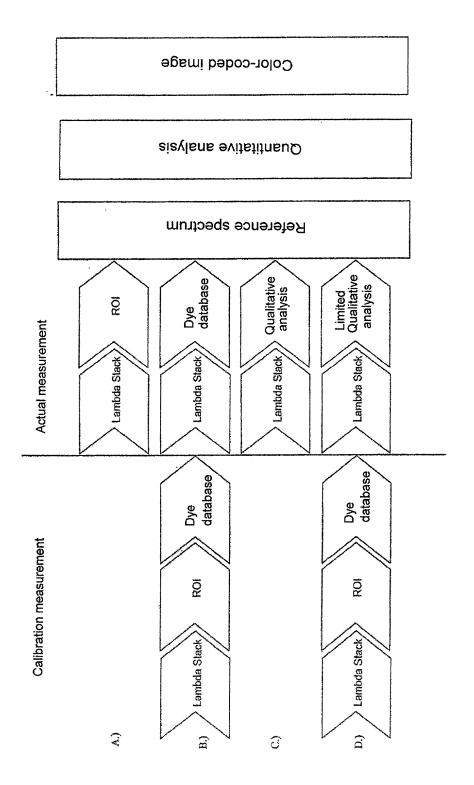






700 500 600 Wavelength (nm) 7 **L**3 200 1.2 400 T noissime eanebaeaoulii

(;



Intensity 250 + 1

150

200

100

200

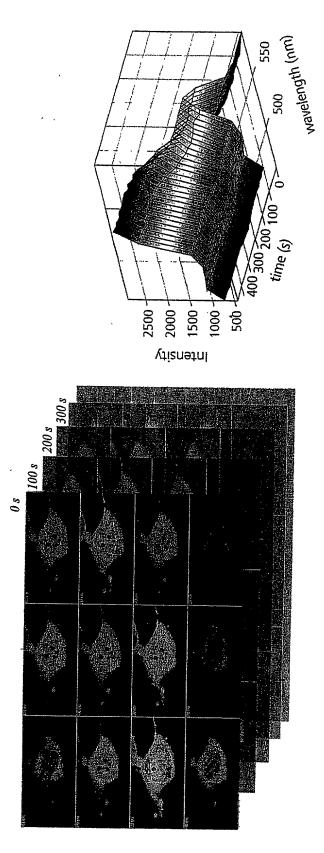
T 0

Figure: 12

b.)

a.)

B.)



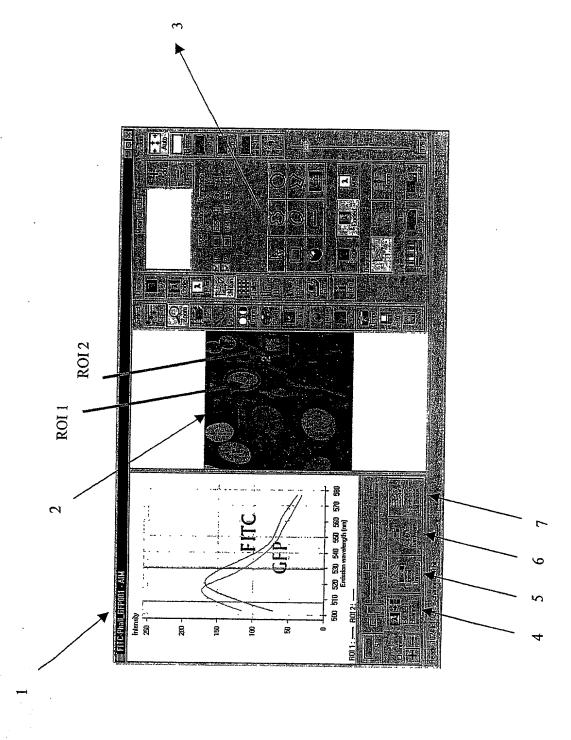
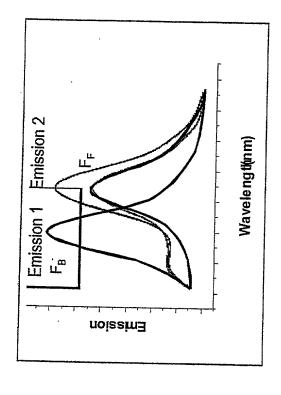
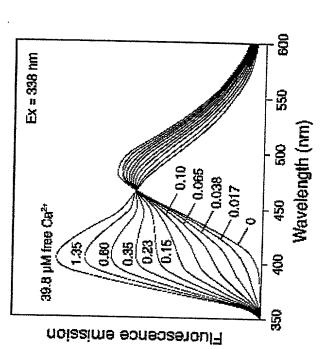


Figure: 14



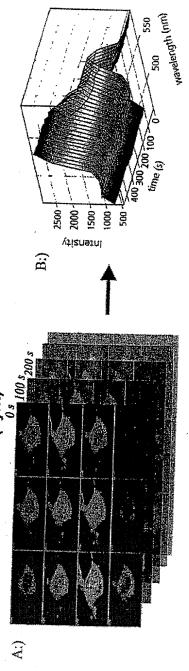


A.)

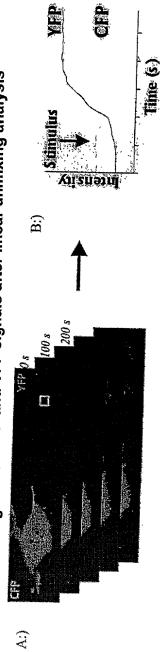
Figure: 16

Example: FRET sensor for calcium concentration measurements Yellow Cameleon2 (Miyawaki et al. Proc Natl Acad Sci USA 96, 2135-2140, (March 1999))

Series of Lambda Stacks (xyλt)



Series of images with CFP and YFP signals after linear unmixing analysis c;



3. Series of ratio images (YFP/CFP)

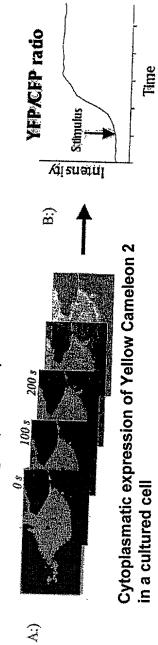


Figure: 18